

AMENDMENTS TO THE CLAIMS

1. (cancelled) A system to rate refinery feed stocks for the formation of deposits on solid refinery surfaces comprising:

(a) a solid nub having a deposit surface,

(b) means for controlling the magnitude and duration of the temperature of said surface, such that the temperature emulates the temperature variation of the solid refinery surface,

(c) means for introducing fuel and/or fuel containing additives onto said surface, and

2. (cancelled) The system of claim 1 further comprising a means for weighing said nub.

3. (cancelled) The system of claim 1 further comprising an enclosure and a means for introducing gas into said enclosure.

4. (cancelled) The system of claim 1 wherein said nub is steel, aluminum, brass or any solid material, or combination thereof.

5. (cancelled) The system of claim 1 wherein said means to control temperature includes a coiled cable heater, thermocouple and a temperature programmer.

6. (cancelled) The system of claim 1 wherein said means for introducing fuel and/or fuel additives, including a syringe pump and a hypodermic needle.

7. (cancelled) The system of claim 3 wherein said enclosure is a glass bell shaped shield.

8. (cancelled) The system of claim 3 wherein said gas is air.

9. (cancelled) The system of claim 3 wherein said gas is inert.

10. (currently amended) A method to ~~rate fuels and fuel additives~~ determine the conditions for refinery feed stocks and/or refinery feed stocks containing additives for the formation and mitigation of deposits onto a solid in a controlled environment, having a surface of a given shape and material comprising:

(a) controlling the environment and magnitude and duration of the temperature of said surface such that the environment and the temperature emulates the environment and temperature variation of the solid refinery surface temperature of said surface,

(b) introducing ~~fuel~~ refinery feed stocks and/or ~~fuel~~ refinery feed stocks containing additives in controlled amounts onto said surface, and

(c) weighing said solid before and after said introducing step to determine the amount of deposit onto said surface.

11. (new) The method of claim 10 further comprising the step of enclosing said solid.

12. (new) The method of claim 11 further comprising the step of injecting a gas into said enclosure.

13.(new) The method of claim 10 further comprising the step of programming the temperature of said surface.

14.(new) The method of claim 12 wherein said gas is air.

15.(new) The method of claim 12 wherein said gas is nitrogen.